

Attorney Docket No.:
MORN-0006 (108347.00017)

PATENT

an organic acid generated from a salt of the organic acid; and

an anion of a strong oxyacid,

wherein the acidic composition is less corrosive to a ferrous metal than is a solution of a mineral acid having the same acidic pH value as that of the acidic composition, and

wherein the acid composition is more biocidal than a mixture of the organic acid and a metal salt of the organic acid which mixture having the same acid normality value as that of the acidic composition.

REMARKS

Applicants have carefully considered this Application in connection with the Examiner's Action, and respectfully request reconsideration of this Application in view of the above Amendment and the following remarks.

The Examiner has stated that claims 1, 3, and 10-11 are pending this application in light of Applicant's recent election of species. Applicant respectfully submits that claim 6 reads on the elected subject matter as well. Claim 6 is directed to the acidic composition of Claim 1, "wherein the polyvalent cation comprises **an ion of magnesium**, calcium, ferrous, copper, or zinc." Applicant's elected species includes an ion of magnesium. For this reason, Claim 6 is directed to elected subject matter and should therefore be pending in the application as well.

I. Rejections Under 35 U.S.C. 103(a)

Claims 1, 3, and 10-11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/48469. Applicant submits that Claim 1 has been amended above to recite the use of the **salt of an organic acid**. This amendment similarly applies to Claims 3, 6, and 10-11 by virtue of their dependency on Claim 1. WO 00/48469 **does not teach or suggest the use of a salt of an organic acid** and thus does not render the claimed subject matter unpatentable.

PATENT

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While using the salt of the organic acid may appear to be identical to adding the organic acid to the mixture containing a base, Applicant submits that this is not necessarily the case. In support of this, Applicant respectfully points out that the direct reaction between calcium hydroxide and sulfuric acid, which should give a saturated solution of calcium sulfate in sulfuric acid, actually gives a solution containing complex anions that results in a solution with markedly different properties from those which would normally be predicted. This has been confirmed by preparing a saturated solution of calcium sulfate in sulfuric acid by direct dissolution of calcium sulfate in dilute sulfuric acid ("Solution #1"). The solution so prepared ("Solution #1") was compared to the solution prepared by using calcium hydroxide and sulfuric acid ("AGIIS"). It was found that Solution #1 lacked the non-corrosive properties of AGIIS.

Thus, Applicant respectfully submits that the regeneration of the organic acid from its salt by a regenerating acid will not necessarily give the same mixture obtained from adding the free organic acid to the acidic solution.

The inclusion of the salt of an (relatively weak) organic acid has unexpected effects on the properties of the solution. Applicant respectfully submits that these properties could not have been predicted based on the knowledge of the effects of the AGIIS solution and the organic acid separately. The available data suggests that there is a synergism between the organic acid and the AGIIS solution that could not have been predicted based on the state of the art knowledge prior to this discovery.

II. Conclusion

Applicants respectfully submit that, in light of the foregoing Amendments and comments, Claims 1, 3, 6, and 10-11 are in condition for allowance. A Notice of Allowance is therefore requested.

If the Examiner has any other matters which pertain to this Application, the Examiner is encouraged to contact the undersigned to resolve these matters by Examiner's Amendment where possible.

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Respectfully submitted,



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Date

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claim 1 has been amended as follows:

1. (Amended) An acidic composition having an acidic pH value and an acid normality value, the acidic composition comprising:

a monovalent or polyvalent cation;

an organic acid generated from a salt of the organic acid; and

an anion of a strong oxyacid,

wherein the acidic composition is less corrosive to a ferrous metal than is a solution of a mineral acid having the same acidic pH value as that of the acidic composition, and

wherein the acid composition is more biocidal than a mixture of the organic acid and a metal salt of the organic acid which mixture having the same acid normality value as that of the acidic composition.